

2833

Attorney Docket No. 1442.1007

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#3 IDS  
Shaen  
4-7-00

In re Patent Application of:

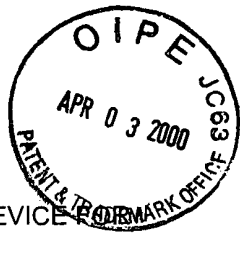
Tatsuya FUJIKI et al.

Application No.: 09/477,405

Filed: January 4, 2000

CPA Filing Date (if applicable):

For: FUNCTION EXPANDING DEVICE  
ELECTRONIC HARDWARE



Group Art Unit: 2833

Examiner:

RECEIVED

APR 04 2000

TECHNOLOGY CENTER 2800

Assistant Commissioner for Patents  
Washington, D.C. 20231

**INFORMATION DISCLOSURE STATEMENT**

In accordance with the duty of disclosure provisions of 37 CFR §1.56, there is hereby provided certain information which the Examiner may consider material to the examination of the subject U.S. patent application. It is requested that the Examiner make this information of record if it is deemed material to the examination of the subject application.

1. Enclosures accompanying this Information Disclosure Statement are:

- 1a. ☒ Form PTO-1449.
- 1b. ☒ Copies of IDS citations. (If box not checked, see Item 6, below)
- 1c. ☐ An English language copy of a Search Report or an Official Action from a counterpart foreign application or the PCT International Search Report.
- 1d. ☒ English language translation (complete or relevant portion(s)) attached to each non-English language publication.
- 1e. ☒ Explanations of Relevancy of References (ATTACHMENT 1(e), hereto) for providing a concise explanation of each non-English publication.
- 1f. ☒ List of Copending Applications (ATTACHMENT 1(f), hereto).

2. ☒ This Information Disclosure Statement is filed under 37 CFR §1.97(b) before:

(Check either Item 2a or 2b)

- 2a. ☒ the latter of three (3) months after the U.S. patent application filing date or the first Office Action on the merits therein; or
- 2b. ☐ the latter of three (3) months after the continued prosecution application (CPA) filing date or the first Office Action on the merits therein.

Accordingly, no fee or § 1.97(e) Statement is required.

3. ☐ This Information Disclosure Statement is filed under 37 CFR §1.97(c) after the first Office Action on the merits, but before a Final Office Action or a Notice of Allowance.

*(Check either Item 3a or 3b; Item 3b to be checked if any reference known for more than 3 months)*

3a. ☐ The §1.97(e) Statement in Item 5 below is applicable. Accordingly, no fee is required.

3b. ☐ The \$240.00 fee set forth in 37 CFR §1.17(p) in accordance with 37 CFR §1.97(c) is:  
☐ enclosed.  
☐ to be charged to Deposit Account No. 19-3935.

4. ☐ This Information Disclosure Statement is filed under 37 CFR §1.97(d) after the Final Office Action or the Notice of Allowance, but before payment of the Issue Fee.

The § 1.97(e) Statement (Item 5 below) is applicable.

A Petition to the Commissioner is hereby made under 37 CFR §1.97(d) to request consideration of this Information Disclosure Statement. The \$130.00 fee set forth in 37 CFR §1.17(i) is:

☐ enclosed.  
☐ to be charged to Deposit Account No. 19-3935.

5. ☐ Statement under § 1.97(e) (*applicable if Item 3a or Item 4 is checked*)

*(Check either Item 5a or 5b)*

5a. ☐ In accordance with 37 CFR §1.97(e)(1), it is stated that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. (Federal Register, Vol. 62, No. 197, page 53190, October 1997.)

5b. ☐ In accordance with 37 CFR §1.97(e)(2), it is stated that no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known by any individual designated in §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. (Federal Register, Vol. 62, No. 197, page 53190, October 1997.)

6. ☐ This is a continuation/divisional/continuation-in-part application under 37 CFR §1.53(b).

*(Check appropriate Items 6a and/or 6b)*

6a. ☐ Copies of the publications listed on the attached Form PTO-1449 which were previously cited in prior application Serial No. \_\_\_\_\_, filed on \_\_\_\_\_, of which this application claims priority under 35 U.S.C. §120, have been omitted pursuant to 37 CFR §1.98(d).

6b. ☐ Copies of the publications listed on the attached Form PTO-1449 which were not previously cited in prior application Serial No. \_\_\_\_\_, filed on \_\_\_\_\_, of which this application claims priority under 35 U.S.C. §120, are provided herewith.

7. ☐ This is a continuation/divisional application under 37 CFR §1.53(d).

*(Check either Item 7a or 7b)*

7a. ☐ The Issue Fee has not been paid.

7b. ☐ A Petition to Withdraw from issue under 37 CFR §1.313(b)(5) is filed concurrently herewith or has been granted. A continuation application under 37 CFR §1.53(d) after payment of the Issue Fee is proper in accordance with 37 CFR §1.53(d)(1)(ii).

8. ☐ This is a Supplemental Information Disclosure Statement.

(Check either Item 8a or 8b)

- 8a. ☐ This Supplemental Information Disclosure Statement under 37 CFR §1.97(f) supplements the Information Disclosure Statement filed on \_\_\_\_\_. A bona fide attempt was made to comply with 37 CFR §1.98, but inadvertent omissions were made. These omissions have been corrected herein. Accordingly, additional time is requested so that this Supplemental IDS can be considered as if properly filed on \_\_\_\_\_.
- 8b. ☐ This Supplemental Information Disclosure Statement is timely filed within one (1) month of the Notice under 37 CFR §1.97(i), mailed \_\_\_\_\_. (MPEP 609, Form ¶ 6.51, July 1997.)

9. ☒ In accordance with 37 CFR §1.98, a concise explanation of what is presently understood to be the relevance of each non-English language publication is:

(Check appropriate Items 9a, 9b, 9c and/or 9d)

- 9a. ☐ satisfied because all non-English language publications were cited on the enclosed English language copy of the PCT International Search Report or the search report from a counterpart foreign application indicating the degree of relevance found by the foreign office. (See U.S. Patent & Trademark Office's authorization in the Federal Register, Vol. 57, No. 12, January 17, 1992, at page 2031 (Reply to Comment 68).)
- 9b. ☐ set forth in the application.
- 9c. ☒ satisfied because an English language translation (complete or relevant portion(s)) is attached to each non-English language publication.
- 9d. ☒ enclosed as Attachment 1(e), hereto.

10. No admission is made that the information cited in this Statement is, or is considered to be, material to patentability nor a representation that a search has been made (other than search report(s) from a counterpart foreign application or a PCT International Search Report, if submitted herewith). 37 CFR §§ 1.97(g) and (h).

11. The Commissioner is authorized to credit any overpayment or charge any additional fee required under 37 CFR §1.17 for this Information Disclosure Statement and/or Petition to Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

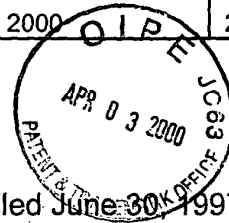
Dated: April 3, 2000  
700 Eleventh Street, N.W., Suite 500  
Washington, D.C. 20001  
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By: \_\_\_\_\_

H. J. Staas  
Registration No. 22,010

**ATTACHMENT 1(e)**

<b>EXPLANATIONS OF RELEVANCY OF REFERENCES</b>	ATTORNEY DOCKET NO. 1442.1007	APPLICATION NO. 09/477,405
	FIRST NAMED INVENTOR Tatsuya FUJIKI et al.	
	FILING DATE January 4, 2000	GROUP ART UNIT 2833



Japanese Reference AI corresponds to U.S. reference AA.

Japanese Reference CG corresponds to USSN 08/885,857 filed June 30, 1997 (listed on Attachment 1(f) hereto).

Japanese Reference CH (which has not yet been laid open and is not attached hereto) corresponds to USSN 08/283,307 filed April 1, 1999.

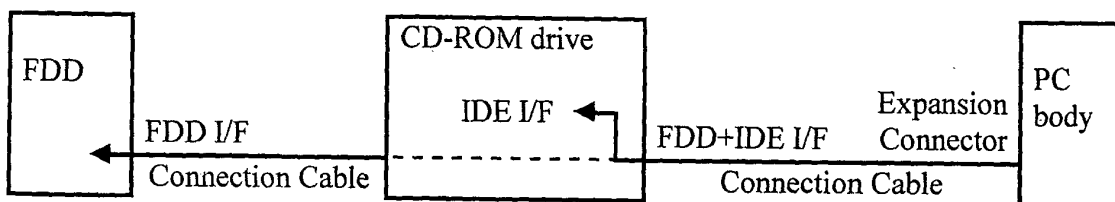
References AM, AN and AO:

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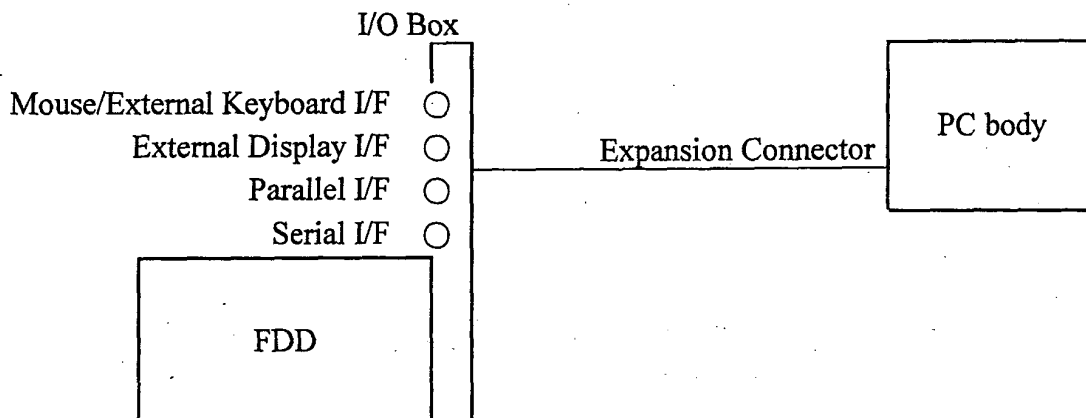
Referring to SANYO Catalogue, a description will be given of an expansion device for a notebook PC MBC G1/G1F and the difference from the present invention. The expansion device is configured to connect an expansion auxiliary storage device for the PC body to a dedicated expansion connector of the PC body via a dedicated cable. When two or more auxiliary storage devices are connected, they may be connected serially as the expansion connector of the PC body initially includes an interface connectible to the auxiliary storage devices. The following diagram illustrates an exemplified configuration of SANYO notebook PC MBC-G1/G1F.



However, the above configuration inherently has its limitation on usable connector specifications, and thus on specifications of the expansion auxiliary storage devices. Accordingly, in the above example, if a succeeding specification of the PC devices other than CD-ROM drive and FDD, the expansion cable and expansion body should be altered. Therefore, every time a need for establishing connection with another kind of the expansion device arises, another specification of the expansion unit and a cable therefor should be

newly designed, while in order to establish connection with the FDD, connection with the CD-ROM drive is required. Further, an addition of an interface signal to the expansion connector would disadvantageously raise the size of the connector, imposing limitations on positions in the device where the connector is connectible, and increase the thickness of the cable, requiring the cable to be longer in light of its reduced flexibility.

Referring now to PANASONIC Catalogue, a description will be given of an expansion method for a subnotebook PC CF-S51J8 and the difference from the present invention. According to this expansion method, common I/O connectors for compatible PCs and an FDD interface are integrated into a single expansion connector. The following diagram illustrates an exemplified configuration of PANASONIC subnotebook PC CF-S51J8.



However, the above configuration, which simply provides an integral device of an I/O box and FDD, as no reference is made to connection with an externally connecting type of auxiliary storage devices other than FDD, if the connection with an auxiliary storage device other than FDD is desired to be established, the I/O box needs a change of its configuration. Accordingly, the above method would disadvantageously require a change of the I/O box upon changing the expansion auxiliary storage device.